



Aalborg Universitet

AALBORG UNIVERSITY  
DENMARK

## Evaluation of bio-crude refinery value chains

*experimental fractional distillation, supercritical CO<sub>2</sub> extraction, and hydrotreatment*

Pedersen, Thomas Helmer; Sharma, Kamaldeep; Toor, Saqib; Montesantos, Nikos; Nielsen, Rudi P.; Maschietti, Marco; Rosendahl, Lasse

*Published in:*

EUBCE 2019 - 27<sup>th</sup> European Biomass Conference and Exhibition - Book of Abstracts Summaries

*Publication date:*  
2019

*Document Version*  
Publisher's PDF, also known as Version of record

[Link to publication from Aalborg University](#)

*Citation for published version (APA):*

Pedersen, T. H., Sharma, K., Toor, S., Montesantos, N., Nielsen, R. P., Maschietti, M., & Rosendahl, L. (2019). Evaluation of bio-crude refinery value chains: experimental fractional distillation, supercritical CO<sub>2</sub> extraction, and hydrotreatment. In *EUBCE 2019 - 27<sup>th</sup> European Biomass Conference and Exhibition - Book of Abstracts Summaries* (pp. 508)

### General rights

Copyright and moral rights for the publications made accessible in the public portal are retained by the authors and/or other copyright owners and it is a condition of accessing publications that users recognise and abide by the legal requirements associated with these rights.

- Users may download and print one copy of any publication from the public portal for the purpose of private study or research.
- You may not further distribute the material or use it for any profit-making activity or commercial gain
- You may freely distribute the URL identifying the publication in the public portal -

### Take down policy

If you believe that this document breaches copyright please contact us at [vbn@aub.aau.dk](mailto:vbn@aub.aau.dk) providing details, and we will remove access to the work immediately and investigate your claim.

## **Evaluation of Bio-Crude Refinery Value Chains: Experimental Fractional Distillation, Supercritical Co<sub>2</sub> Extraction, and Hydrotreatment**

Short introductive summary:

The aim of this study is to evaluate and compare HTL value chains, i.e. from lignocellulosic biomass to final fuels, based on state-of-art experimental data from all the involved core processing steps, and more importantly the novel combination of such data, based on established overall carbon and mass balances together with drop-in potentials based on fuel characteristics.

Presenter: **Thomas Helmer PEDERSEN, Aalborg University, Energy Technology Dpt., Aalborg, DENMARK**

Presenter's biography:

Thomas Helmer Pedersen is a researcher and assistant professor at the Department of Energy Technology, Aalborg University, Denmark. His work focuses mainly on liquid fuels production from various feedstock through hydrothermal liquefaction.

*Biographies and Short introductive summaries are supplied directly by presenters and are published here unedited*

Co-authors:

T.H. Pedersen, Aalborg University, Aalborg, DENMARK  
K. Sharma, Aalborg University, Aalborg, DENMARK  
S.S. Toor, Aalborg University, Aalborg, DENMARK  
N. Montesantos, Aalborg University, Esbjerg, DENMARK  
R. Nielsen, Aalborg University, Esbjerg, DENMARK  
M. Maschietti, Aalborg University, Esbjerg, DENMARK  
L. Rosendahl, Aalborg University, Aalborg, DENMARK

Session reference: 3CO.11.4

Subtopic: 3.3 Hydrothermal processing

Topic: 3. BIOMASS CONVERSION TECHNOLOGIES FOR LIQUID AND GASEOUS FUELS,  
CHEMICALS AND MATERIALS